

## DOCUMENT RESUME

ED 336 351

SP 033 233

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TITLE Quantitative and Qualitative Perspectives on Teacher Attitudes: The Third Year.  
PUB DATE Apr 91  
NOTE 32p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, April 3-7, 1991). For an earlier paper, see ED 310 068.  
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)  
  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS Educational Change; \*Educational Environment; Elementary Secondary Education; Excellence in Education; \*Individual Power; Interviews; Participative Decision Making; School Based Management; School Districts; \*School Restructuring; \*Self Efficacy; Surveys; \*Teacher Attitudes  
IDENTIFIERS \*Jefferson County Public Schools KY; \*Professional Development Schools

## ABSTRACT

Since 1988, teacher surveys and interviews have been conducted in the 24 professional development schools (PDS) in Jefferson County (Kentucky) Public Schools to document teachers' attitudes toward efficacy and empowerment and toward their schools' learning climate. The 1990-1991 survey results show that teachers seem to have positive opinions of their experiences in the restructuring effort. The second stage of the research explored questions regarding "school effects" and "multiplier effects." Research on school effects showed that when school efficacy, personal efficacy, and teaching techniques are examined by school, variance among schools is considerably lower than among individual respondents, suggesting influence of school atmosphere on teacher attitudes. To study multiplier effects, 10 factors from the survey data were applied to 4 groups of PDS that were also engaged in participatory management activities. Analysis suggests that simultaneous involvement with more than one type of restructuring has a positive effect on teacher attitudes. In subsequent interviews with teachers and administrators in 3 of the 24 PDS, while showing appreciation for shared decision-making, teachers more often accounted for their positive attitudes by describing a supportive administrative style; a change-oriented, collegial faculty; and a student-centered orientation. An appendix includes the 10 factors used in the multiplier effects phase and data tables. (AMH)

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QUANTITATIVE AND QUALITATIVE PERSPECTIVES ON  
TEACHER ATTITUDES: THE THIRD YEAR

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Paper prepared for the annual meeting, American Educational Research  
Association, Chicago, April 1991

## ACKNOWLEDGMENTS

The authors wish to acknowledge the Center for the Collaborative Advancement of the Teaching Profession, School of Education, University of Louisville, for its support of the research reported here. We also thank the administration and faculty of the 24 schools who so graciously shared their insights with us for the past three years.

The authors also wish to thank Donna Gaus, Luis Canales, Kit Peixotto, Donnie Lee, and Samantha Israel for their assistance with the interviews.

# QUANTITATIVE AND QUALITATIVE PERSPECTIVES ON TEACHER ATTITUDES: THE THIRD YEAR

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## INTRODUCTION

Over the past several years we have been examining teachers' attitudes in the 24 professional development schools (PDS) in Jefferson County, Kentucky, Public Schools (Ruscoe, Whitford, Egginton, & Esselman, 1989; Ruscoe, Esselman, Whitford, & Egginton, 1990). The teachers in these schools, who elected to participate in this restructuring effort, have been engaged in a variety of activities designed to improve schools and thereby enhance student learning and teacher induction.

Working collaboratively with the school district, we have surveyed and interviewed teachers in the PDSs each year since 1988. Both the surveys and the interviews have sought to better our understanding of how teachers view themselves in terms of efficacy and empowerment and how they view the learning climate of their schools. Obviously, we have hoped to document that teachers engaged in restructuring hold increasingly more positive attitudes toward these critical facets of their professional lives over time.

The purpose of the present paper is to summarize the 1990-91 survey and interview findings and to suggest additional insights into the process of restructuring which emerge from these findings. It should be pointed out "up front" that these findings and insights represent an attempt not only to study professional development schools but also to blend quantitative and qualitative approaches to research. While recognizing important underlying epistemological differences between the two approaches, we have endeavored to capitalize on the strengths of each in order to provide a more comprehensive picture of restructuring.

## THE SURVEYS

Teachers' attitudes were assessed through the use of a survey instrument which was administered in the spring of each of the three years. The 1988 survey included 9 demographic questions and 73 attitudinal items. Based on results from this survey and from interviews with teachers, the 1989 version was revised to include 4 demographic questions and 61 attitudinal questions focusing on efficacy, learning climate, and empowerment. The 1989 survey form was used again in 1990.

The 1990 survey was completed by 949 teachers, with a response rate of 86%, compared to response rates of 94% (1059 respondents) in 1988 and 64% (739 respondents) in 1989. Demographically, the 1990 sample is fairly comparable to the 1989 and 1988 samples.

Teachers in the 24 professional development schools continue to hold fairly positive attitudes toward issues of teachers' efficacy, teachers' influence and role in school decisionmaking, and school learning climate. These attitudes remain remarkably stable over the three-year period. To be sure, there is some fluctuation from year to year, and there are noticeable differences among subgroups of teachers, particularly differences associated with the level of schooling at which respondents teach. But overall, teachers seem to be relatively sanguine about their experiences in this restructuring effort.

For example, teachers continue to report a fairly high sense of efficacy. But there are important qualifications. First, teachers simply are not confident in making a difference if parents are not also involved in motivating their children and if students are not disciplined at home. Yet, teachers continue to believe in their own abilities to teach and to maintain classroom discipline. Second, although women report a higher sense of

efficacy than do men, this difference virtually disappears when examined by level. That is, men and women at the same level do not differ significantly.

Teachers also continue to report fairly positive attitudes about their school's learning climate. But again, there are important qualifications. First, middle school teachers are less positive in 1990 than earlier, while high school teachers are more positive. Second, teachers are becoming less certain that a positive feeling permeates their school and that their school has an effective attendance program.

In addition, teachers report a moderately high sense of influence over school issues, particularly those issues associated most directly with classroom practice such as instructional methods and reporting student progress to parents. Respondents, however, continue to report relatively little influence over evaluating the performance either of other teachers or of administrators. Interestingly, many respondents do not want influence over the former but would like influence over the latter.

Finally, teachers continue to become more positive about school decisionmaking, especially about having time and support for shared decisionmaking. Moreover, those teachers who work in teams are especially positive about team decisionmaking. In general, however, respondents are more likely to report that progress has been made in the "process" of establishing shared decisionmaking than in the actual "products" of such decisionmaking.

The finding that teachers continue to be relatively positive about these critical facets of their professional lives under restructuring must be viewed with some caution, however. First, we have not found the ever-increasing positive attitudes that some might have anticipated. Instead, it may be argued that teachers' attitudes have become more "realistic" as they have discovered that restructuring not only involves a lot of hard work but also provides little in the way of immediate, guaranteed results.

Second, increases in positive attitudes may in part be attributable to two of the classical threats to research validity--instrumentation and contemporary history. By using essentially the same survey for three years, we have unavoidably risked the threat that respondents have become "test-wise." This threat is exacerbated by the fact that the issues examined in the survey have also received a good deal of local and national publicity during the course of the research. These are "hot" issues, "appropriate" responses to which have become part of our conventional professional wisdom. Thus, it is difficult for teachers to take a stance that schools do not make a difference or that restructuring does not improve school climate.

Despite these reservations, we would nonetheless maintain that teachers' experiences in professional development schools do seem to be positive, even if not quite to the degree that we may want to show.

#### ADDITIONAL INSIGHTS

The survey data support, to varying degrees, the contention that restructuring as represented by the efforts of the professional development schools does have a generally positive effect on teachers' attitudes toward critical facets of their professional lives. The results, moreover, suggest two additional questions which can be explored, at least tentatively, within the current research framework: 1) are there important "school effects" which are hidden when the results are examined by individual respondents? and 2) are there "multiplier effects" for those schools which participate in more than one restructuring effort simultaneously?

#### School Effects

In the overall summary we have focused on the reactions of teachers to various aspects of restructuring. In doing so, we have largely ignored the possibility that teachers' reactions are tempered by the particular schools in which they teach. Although we have pointed out important differences in

responses by level of schooling, we have not looked at differences in responses by individual schools. Yet, each school may have its own distinctive "personality" which may affect the ways in which teachers in that school react to restructuring. That is, it may be appropriate to move our level of conceptualization from the individual teacher to the school, thereby gaining additional insights into the effects of restructuring.

One of the things which has puzzled us over the course of the three years of research is the relatively low level of correlation among the various measures of teacher efficacy. The 14 items about efficacy factored into three distinct clusters: 1) school efficacy: teachers' belief that school can overcome problems associated with students' home environment (7 items), 2) personal efficacy: teachers' belief in their own, personal efficacy (4 items), and 3) teaching techniques: teachers' belief in their own teaching techniques (3 items). In 1990, for example, the correlation between school efficacy and personal efficacy was .42, between school efficacy and teaching techniques was .23, and between personal efficacy and teaching techniques was .38. While these are statistically significant correlations, due to the large number of respondents, they certainly do not do much to explain variance among these factors.

We did not, of course, expect perfect correlations. Teachers may well be confident about their own personal efficacy without having the same confidence about other teachers. Similarly, teachers may well have faith in their own teaching techniques and still not believe that schools can overcome problems associated with students' home environment. Yet, we did expect correlations higher than those obtained in any of the three years.

A quite different picture emerges, however, when these efficacy factors are examined by school rather than by individual. Again looking at 1990, we find very high correlations at the school level: .82 between school efficacy



and personal efficacy, .66 between school efficacy and teaching techniques, and .90 between personal efficacy and teaching techniques. These correlations are particularly impressive given that the variance among schools is considerably lower than the variance among individual respondents.

The difference between individual and school correlations may be illustrated graphically. When we examine the scattergram depicting the correlation between personal efficacy and teaching techniques, we can see how distinctive the pattern is for schools as compared to individuals. (See Figures 1 and 2.) What these figures suggest is that individual schools may indeed have distinctive atmospheres which affect, either positively or negatively, the sense of efficacy of teachers within those schools.

The question of school atmosphere may also be explored by considering the relationship between teacher efficacy and more general measures of school learning climate. During the course of the research, we have asked respondents a series of questions aimed at ascertaining their perceptions of the learning climate of their schools. Responses to these questions produce two rather different factors related to climate: one factor, composed of seven items, measures the extent to which the school provides an "orderly" climate for learning; the second factor, composed of four items, measures the extent to which the school provides an "open" climate for learning.

There is a fairly strong positive correlation (.75) between the two factors when responses are analyzed by school. More interesting, however, is the fact that the orderly climate factor correlates significantly (.53) with the third efficacy factor (belief in teaching techniques), while the open climate factor correlates significantly (.48) only with the first efficacy factor (belief in the school's ability to overcome problems associated with students' home environment). That is, teachers who perceive that their schools provide an orderly climate express a strong belief in their own

teaching techniques, while teachers who perceive that their schools provide an open climate express a strong belief in the ability of schools to overcome problems associated with students' home environment. Again, these school-level differences are largely lost when only individual responses are examined.

Considering school-level rather than individual responses also suggests another way in which to examine the data. When an individual respondent is markedly different from the group, we may see that difference as an interesting idiosyncrasy. But when a whole school is markedly different from other schools, this school is a real anomaly--or, to borrow from the language of effective schools research, a potential "outlier." On the one hand, a school which proves to be an outlier using this method of analysis invites additional investigation to determine why it holds this unusual position. On the other hand, an expected outlier which proves not to be so also invites further investigation.

For example, the high positive correlations among the efficacy factors suggest that most schools are very consistent, having generally comparable scores on all three measures--e.g., high on all measures or low on all measures. We have been especially interested in three schools--one elementary school, one middle school, and one high school--which have been recognized, both locally and nationally, as exceptional schools. If we look at these three schools in terms of outlier status on efficacy measures, three rather different pictures of "exceptionality" begin to emerge. The elementary school is exceptional because, with such high scores on all three measures, it occupies a position rather dramatically different from all the other schools. The middle school is exceptional because, while it has singularly high scores on both personal efficacy and teaching techniques, it has a relatively low score on school efficacy. The high school is exceptional, however, because,

despite its reputation, it falls right in the middle of the group. (See Figures 3 and 4.) We will consider these three schools later when we turn to the interview data.

### Multiplier Effects

Jefferson County (Kentucky) public schools, like so many other school districts, are engaged in a variety of restructuring efforts simultaneously. Many of the PDSs are also involved in participatory management (PM) activities, begun in the district in 1988, to get teachers more involved in decisionmaking. PM activities have received even greater emphasis since the passage of the Kentucky Education Reform Act (KERA) of 1990, part of which legislates that each school in the state must have site-based management within the next several years.

Thus, some of the PDS sites are only PDS sites. Others are also PM sites, some since 1988, some since 1989. In addition, as the research has expanded, we now have data from six schools which are only PM sites. In effect, then, we have four groups of schools which differ in the extent to which they are involved in these two aspects of restructuring:

Group One: four PDS middle schools and one PDS high school which have also been part of the PM effort since 1988;

Group Two: two PDS elementary schools, two PDS middle schools, and two PDS high schools which have also been part of the PM effort since 1989;

Group Three: six PDS elementary schools, two PDS middle schools, and four PDS high schools which are not involved in PM activities; and

Group Four: two PM elementary schools, two PM middle schools, and two PM high schools which are not involved in PDS activities. (One school has been eliminated from the analysis because it contains all three levels of schooling.)

These four groups represent what appear to be different degrees of exposure to district-sponsored restructuring. If involvement in restructuring does indeed produce more positive teacher attitudes, then one might suspect that Group One should be the most positive and Group Two the next most positive. One would also suspect that Group Three, while less positive than the first two groups, would be more positive than Group Four because the former schools have been involved in a single restructuring effort longer than the latter group. That is, a "multiplier effect" might operate such that simultaneous involvement in more than one restructuring activity--particularly over a longer period of time--will be associated with more positive teacher attitudes.

Before considering the accuracy of this suspicion, we need to point out two possible limitations to the data. First, as we have already seen, important level differences occur. Therefore, we must be careful to distinguish between level differences and differences presumably brought about by participating in more than one type of restructuring simultaneously. Such care is especially important in comparing Group One, which consists largely of middle schools, and Group Three, which consists largely of elementary schools. Second, the six PM schools, chosen because they expressed a willingness to participate in the study, do not necessarily represent a random sample from among the 96 PM schools now operating in the district and thus may not be typical of this group of schools.

In comparing these four groups of schools, we have used 10 factors which emerged from the analysis of the data. Three of these factors deal with teacher efficacy, two with learning climate, three with teacher influence, and two with teacher decisionmaking. (These factors are described in the appendix.)

First, looking at differences among the four groups regardless of level, we find that consistently--and statistically significantly--Group One has the most positive score on each factor, with the exception of Factor 10, for which they are tied with Group Four. That is, teachers in those schools which have the longest involvement with both types of restructuring do indeed have more positive attitudes.

Second, this finding is largely confirmed when we look at middle schools and high schools separately. Again, Group One teachers at each of these two levels are generally most positive: both middle school teachers and high school teachers in schools which have the longest involvement with both types of restructuring are most positive on 8 of the 10 factors. In the case of elementary schools, because no elementary schools are included in Group One, the situation is somewhat different but still consistent with our original suspicion. Elementary teachers in Group Two (that is, those in schools which are PDS sites which have also been PM sites since 1989) are most positive on 8 of the 10 factors.

Third, however, the other groups do not consistently fall into place in the way we had suspected. That is, Group Two is not consistently more positive than Group Three, which in turn is not consistently more positive than Group Four. In order to understand this apparent inconsistency, it is necessary to consider an additional argument. Given that PDS restructuring is concerned primarily with teacher practice and PM restructuring primarily with teacher governance, it might be expected that PDS involvement would be more important for the first five factors (teacher efficacy and learning climate), while PM involvement would be more important for the last five factors (teacher influence and teacher decisionmaking).

This difference between teacher practice and teacher governance emphasis is especially noticeable in the elementary schools. Consistently, Group Four

(PM only sites) are least positive on the first five factors (teacher practice) while Group Three (PDS only sites) are least positive on the last five factors (teacher governance). Group Three middle school teachers are also least positive on the last five factors, but they are least positive on the first five as well. Virtually no consistency is noticeable for high school teachers, with the important exception, discussed above, that those in schools most involved in restructuring also tend to be the most positive.

While this preliminary analysis of possible multiplier effects has been only partially successful, it does suggest, at the least, that simultaneous involvement with more than one type of restructuring does have a positive effect on teacher attitudes. It may also be that an item-by-item analysis of the data would reveal more consistency than is found when items are grouped into the ten factors we have used in this analysis.

#### INTERVIEW DATA

While the quantitative analysis helps to document school and multiplier effects, it does little to explain them. The data do suggest potential sites for and focuses of the interview portion of the study. To gain deeper understanding of what these data mean, we now turn to interview results.

In January 1991, we selected three of the 24 schools for follow-up interviews. Over the past several years, the faculty and administration of each of these schools--an elementary, a middle, and a high school--have demonstrated a willingness to try a variety of new strategies in curriculum, teaching, and school organization. For this reason, they provided excellent sites to explore further the effects of engaging in multiple reform efforts.

During February, with the assistance of a team of graduate students, we conducted 45 interviews with teachers and administrators in the three schools. Since we have been collecting qualitative data from these schools for three to five years, we have a sense of the array of opinions about reform held by

those in the schools. For example, in selecting those to be interviewed at the middle and high schools, we asked key informants to nominate reformers, reviewers, and resisters, categories used by some in these schools to characterize their work.

While we asked the same set of questions of everyone, each interviewer also encouraged additional comments through probe questions based on the response offered. Most interviews lasted between 30-45 minutes; a few were as long as 60-90 minutes. All but three interviews were audiotaped and transcribed; detailed notes were taken by the interviewer in the three instances when a respondent did not wish to be taped.

We analyzed the interviews by reading them several times and looking for themes within and across the schools. We then discussed the themes among ourselves and with several key informants and reread the data to double check the evidence for the themes, select illustrative quotes, and look for discrepant cases. Two types of themes emerged: consensus themes--that is, characteristics that apply in varying degrees in all three schools; and, unresolved issues.

#### Consensus Themes

It is important to note here that all three schools engage in participatory management under the auspices of the district's four-year PM agreement with the local teachers' association. In fact, the high school began using a steering committee prior to the agreement; the middle school voted overwhelmingly to become a PM site during the first year of the agreement; and the elementary school became a PM site during the second year of the agreement. In addition, all faculty in the elementary and middle school and an increasing number of the high school teachers are organized into teams which meet regularly for planning.



These opportunities, ranging from having input and influence to actual decisionmaking authority, are highly valued by the teachers involved. Many credit such empowerment, which would not have occurred without the principal's support, for the relatively high degree of efficacy indicated in the survey data. (See Ruscoe et al., 1989 and Ruscoe et al., 1990 for more detail on teachers' perceptions of a strong connection between decisionmaking authority and efficacy.)

During this third round of follow-up interviews, some teachers continued to mention the importance of shared decisionmaking, but more often they accounted for the positive attitudes indicated by the survey data by describing an open, supportive administrative style; a change-oriented, collegial faculty; and, an overriding student-centered orientation. In the next sections, each of these themes is discussed briefly and illustrated with quotes from the interviews. Also it should be noted that each theme is characterized a bit differently at each school with greater diversity of opinion, when it occurs, as we move from the highly consensual elementary school to the more diverse middle school and high school.

School administration. The interview data are consistent with evidence presented in other studies, particularly the effective schools research, about the importance of the principal in unusually successful schools. That is, almost all respondents talked about the significance of the principal in providing opportunities for change to occur. Even respondents who were fairly negative about the need to alter practices recognized the principal's role either in forcefully leading change or in creating conditions which encourage teachers to take the lead and try new ideas.

For example, at the elementary school, teachers described a strong, resourceful leader whose presence is felt throughout the school. One teacher captured the views of many with this statement:



I've been around for a lot of years and I've been to a lot of schools. So I can probably help you in accounting for what's positive and what's negative at various schools. . . . The positive really comes from the top. If you have a positive administrator, then you have a positive staff and positive students. It's like going down the stairs. So I think the big thing is that the principal has said, "[This school] is for kids. We're all here for them." Negativism just isn't allowed here. When there's a problem or concern, then [the principal] works on it in a positive way. That's where it all comes from--the top.

Another teacher commented,

The principal is supportive of progress at any speed. She acknowledges success and finds positive solutions when things are unsuccessful. If you need materials, she will get them. We're also encouraged to write grants.

Yet another teacher, in talking about the elementary school's team structure, commented that among the topics routinely discussed at team meetings was "the principal's agenda."

At the middle school, the principal is characterized as an open, collegial administrator who listens to and supports teachers and encourages them to try new things. Here are some of the respondents' comments:

He allows us so much freedom.

We have an administration that is not afraid of change. You can do almost anything without fear that, if you fail, you are in trouble.

Our principal is really great. All of our administrators go with the flow. They are open and most are far-sighted.

I know I can go into the principal's office at any time and tell him, "I'm mad as hell about this." That's one of the neatest things about being at this school. I'm treated as a professional; my opinion is valued, I feel appreciated here, and leadership opportunities are here.

This leadership style, coupled with a long-standing interdisciplinary teaming structure, probably accounts for several other teachers' commenting that this school is "teacher-driven."

At the high school, one teacher offered this view which captures the opinions of many others:

From the time she walked in the door, you knew who was in command and you knew she was going where she was wanting to go. You knew who was the leader of this school, but she led by giving more empowerment to the

faculty. It takes a person that has a lot of confidence in themselves to be able to do that.

Others echoed comments we also heard at the middle and elementary school:

The positive attitude here begins at the top. The administration is affirming and encouraging.

The administration has created an environment where teachers can teach.

I feel motivated to accomplish tasks--motivated through shared decision-making. I've been given ownership.

The administration has challenged the teachers and given them responsibility.

We get constant strokes from the administration. There is a hope of change that comes from the administration.

The administration passes information back to the teachers--it is not a dictatorship.

Collegial, Change-Oriented Faculty. Similarly, most teachers described their faculties as collegial, supportive, and change oriented.

At the elementary school, we heard:

Teachers look upon each other as a support system--especially on the teams.

There is a strong sharing atmosphere here. It's a bright school with a glad-to-see-you attitude from the people in it.

We are a close-knit group. Everyone works hard together. We wanted shared decisionmaking and planned management.

We spend most of our planning time talking on the team about instructional issues. We're close here. We share ideas. Now everyone has an opinion, but we're a compromising group. And we like to try new ideas.

At the middle school, teachers also talked about their teams as a key feature of shared decisionmaking and source of support:

Through the team structure, teachers are directly involved in making decisions that affect their children. There's a lot of democratic spirit here. We're allowed to try things.

The teams are close and have their own distinctive personalities. We work well together. These people are my friends as well as my colleagues.

The teams contribute to the success of the teachers, but the down side of teaming is that it creates isolation among the teams rather than individuals.

Likewise, at the high school, many respondents talked about the supportive faculty and the collegial atmosphere of their school. Here is a sample:

We are close as a school. We work together well and don't feel threatened by each other.

Lots of teachers give their planning periods to help each other.

Fellow teachers back each other.

There is more collegiality in shared decisionmaking.

Teachers set the tone with students; there's lots of trust among us.

A few high school respondents did not support this direction, however. One teacher who characterized himself as a reviewer--that is, someone who does not actively resist any of the changes but stays removed from them--offered:

I guess I am isolated, but it's because I want to be. I haven't made many changes in my classroom because I think things are going pretty well.

Another expressed ambivalence:

I'm afraid of change just because it makes you uncomfortable. It is easier to do things the way you have always done them. But I do think change is important.

Another's explanation of his lack of involvement reveals that he does not believe that the changes occurring will help much.

The problem isn't necessarily the teacher or what they're doing in the classroom or the lesson particularly. It's the social group [students] are in and the family structure. That's really the battle those kids face every day. That's something that needs to be dealt with that isn't being addressed. Many of these kids need intensive counseling. We don't like to talk about these things, but some of these kids deal with so much...drugs, dope, child abuse. How many teachers prevented suicides this year that we'll never know about? With most kids, the school does a better job than the family or the courts or any other organization that deals with kids.

Yet another teacher commented:

Those involved [in reform] are positive, but not everyone is involved. Some don't want to be involved because they are afraid of change or think it takes too much of their time.

Student Orientation. A third theme characterizing all three schools, again in varying degrees, is an attitude expressed by one respondent as, "We teach kids, not Shakespeare." There is evidence at all levels that a supportive atmosphere for students is valued in the school. Further, many describe this climate as oriented increasingly toward school as a place for students to be successful.

For example, at the elementary school, one teacher explained how multiage teaming promotes a success orientation:

Our changes have been for the success of children. The teams keep kids from being held back because of poor performance in one area. This has eliminated failure totally which increases self esteem. It also provides each student the opportunity to be a leader in his or her own right. I have totally changed as a teacher.

Another teacher, talking about a standing-room-only open house meeting where she could not find a place to park, explained, "People love their school. It's just so supportive of children."

At the middle school, the success orientation is illustrated by one multiage team's pilot of a "no fail" policy through use of an extended year plan. One teacher explained the effects this way:

It's amazing what kids will learn when they realize they'll simply stay here in June until they complete their work. In the past, we would have retained them, and they would have repeated an entire grade level. Or we would have passed them on anyway, and they might have dropped out as soon as they could.

Another middle school teacher characterized the school's climate as

a pleasant, caring place. You wouldn't fit in here if you didn't care about the kids. The students come first. If a child misses the bus, you take them home.

At the high school, again almost everyone commented on the school's student orientation. Some of the comments were:

The students are the number one purpose for being in this building. What I like best about being here is that we are focused on student success, on trying to do what's best for students.

We now have students who go to the office and say, "I want to be in that class because I learn in there." Or some say, "That \_\_\_\_\_ team, that really meant something to me." Now that's new here--that's new behavior for a lot of these kids.

How can I explain our student orientation....Let me put it this way. Yesterday, two kids in the [low level class] from last year came [to my room] in the middle of class, waving their ACT scores. They had never thought about taking the ACT before. And they did well because they wanted it and they wanted it because of [another teacher's] ACT lab run [during the teacher-based guidance time].

At the same time, while many at all levels described their school's climate as increasingly oriented toward school as a place for students to be successful, others, at the middle and high schools, expressed growing concerns about appropriate expectations. For example, one teacher cautiously offered:

I worry that all we're doing is pleasing the kids, making them feel comfortable, and not challenging them appropriately.

Another said:

I would like to think we're making a difference, but I think there are still some quality problems that we are having.

### Emergent Issues

Overall, teacher attitudes, particularly at the elementary school, continue to be positive about engaging in reform activities. In fact, either most of the elementary teachers sincerely agree with one who said, "Things just continue to get better and better," or, if substantively different attitudes exist, we have been unable to tap them. At the middle and high schools, however, we heard more questioning and reflection about change attempts during the interviews than we did in the two previous years, when their comments more closely paralleled those at the elementary school. Issues emerged related to three overlapping areas (a) school organization and the process of change, (b) content or focus of the change efforts, and (c) outcomes.

On the first PDS survey, teachers reporting the highest sense of efficacy worked on teams (Ruscoe et al., 1989). The third survey, however, suggested somewhat lower scores on efficacy. We therefore explored with respondents this statement from the survey: when it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depend on his or her home environment. Most respondents at all levels rejected the statement; however, more middle and high school teachers than elementary teachers qualified their views. Here are some sample quotes:

There are some conditions in the home environment that are very difficult to overcome, such as self image. But a teacher can make compensation for a home environment. The environment won't always make a difference. Most teams believe they can make a difference.

On a survey teachers will say all kids can learn, but I'm not sure they believe that or would say that in the teachers' lounge.

I disagree [with the statement]. I think that's an excuse some people use for not teaching well.

I agree and disagree. I don't see the home influence blocking my effectiveness as a teacher, but in the lounge you will hear talk like "what we are supposed to do when the home environment is so bad."

I think it's a very easy thing to say. You might hear folks spout off about it sometimes in the lounge after a particularly rough day. When you are frustrated, that's what comes to mind. And there's validity to an extent. We cannot overcome all the situations that these children have, but you can't throw the child away. When we are not tired, most of us think we have real obligations to these kids.

Another teacher, explaining that the focus of change efforts had been more on structure and organization, went on to say:

There isn't much sharing of information about curriculum--we've more or less stagnated on the climate, building up a good environment for learning, and the structure. Now we need to address what it is kids need to know. We haven't gotten that far yet, but we don't need to throw out the baby with the bath water. The answer is not to do away with teaming, but we need strong leadership.

Also, in earlier research, local middle school teachers reported many benefits of the interdisciplinary team organization, including reducing teacher isolation (Whitford and Kyle, forthcoming). However, in the most

recent interviews, in response to a question about faculty interrelations, one middle school teacher responded:

There is still a lot of isolation--still a feeling of violating other people's classrooms. You don't just walk into someone else's classroom.

Several others pointed out that while teaming provides increased opportunities for interaction, support, and collegiality among team members, the teams themselves are isolated from each other. Also, several pointed out that they do not believe teaming necessarily alters classroom practices. Thus, while teaming as a way of organizing a school provides many benefits, it does not guarantee support for altering instructional practices.

The desire to focus more on curriculum and classroom instruction was mentioned by about half of the middle school respondents. Two comments illustrate this point:

Some teachers feel the need to address the question: are we doing what we need to be doing in the classroom? The focus as a school should be on quality instruction.

Where we are lacking is within our departments. This year is going to be the year of looking at not just image and not just attitudes, but are we doing what we need to be doing in the classroom.

Image was mentioned by other middle and high school teachers as well. While some expressed concern about the visibility that has come with engaging in multiple reforms efforts, others saw benefits. Concerns were expressed this way:

There is a real strong need that has been brought up by the teachers to look at what are we really about--I mean are we about teaching effectively or image?

I have some concerns about being too visible. Sometimes it seems like something comes down the pike and we leap in. There are so many things going on--maybe too many.

I wonder more and more lately if all the visitors we have and all the times folks are pulled out of school are keeping us from continuing the progress we've made. I worry about that. There's still so much to do here.



Another respondent recognized the public relations aspects of visibility with this comment:

There is what you portray to the media, and what is really going on, but that is one of the reasons teacher efficacy is so high. We are able to talk about the problems.

At the same time, others expressed enthusiasm and ownership:

I love working here. There is a willingness to look at what's on the cutting edge of teaching. Nobody at a faculty meeting told us to do that. There is a collective willingness to be open to change.

Change has been internal, not from the outside. We decided to do the things we are doing.

Another difference between the elementary school on the one hand and the middle and high schools on the other is how respondents characterized the change process itself. Not everyone saw a pattern to the change process, but most did. The elementary school respondents saw change as incremental, with phrases such as "it's like going up steps," and "things just seem to get better and better." Middle and high school respondents tended to agree that change is an uneven, slow process with ups and downs. As one respondent observed:

[Ups and downs] take place every time you try a new teaching approach. I see us on the threshold of another major change--for example, working more on critical thinking rather than on just basic skills and authentic assessment versus the tests such as the CTBS. But it's going to be hard.

Other comments illustrate how new strategies, such as maintaining stable cooperative learning groups over time, require the alteration of other patterns within the school, such as increasing regular attendance. For example:

When I first tried cooperative learning, it was miserable. There was such confusion, and I had problems with attendance. But I've had lots of support from others trying it.

When we first started student as worker, many of the kids were unhappy; it was a struggle to get them to do anything. Cooperative learning--I tried it in my classes, but I've had trouble with attendance. I haven't seen that take off like student as worker did.



Several expressed frustration at the slow pace of change, particularly those with specific ideas about what should change. For example, some interested in particular approaches to curriculum and instruction are very eager for teachers to be in positions to provide staff development leadership within their buildings during the school day. They would like to see resources allocated to several part-time teaching and staff development positions as a means of improving instruction and learning. One commented:

I don't think we are going to see much additional change in the classroom unless we can get teachers in position to help each other more. Workshops are okay for getting people started, but there has to be follow-up and support within the building. We've been talking about positions like that, but we can't seem to get anywhere.

Other high school respondents also shared reflections on the nature of change and the frustration they face:

I think there are plateaus to change. I don't think we spend enough time helping people to ask the right questions and stay focused on why we do things. We're still trying to make sure we're on the edge of the rut. We've gotten up on the edge, but we're not away from it until we create a new one which is totally a change-oriented rut. . .

I think we spend a lot of time in committee meetings talking about what we think we want to do but nothing ever gets changed for whatever reasons--time, money. We are kind of spinning our wheels a lot of times, and that is very frustrating. Sometimes I think our leadership wants our input to know what we think about things and how we would like to change things, but then they go ahead and do it the way they want to do it anyway. They don't support the changes we want. They support the changes they want.

Change is very tiring, time consuming, and frustrating. We just meet and meet and meet, and change comes in such small steps, you cannot see any immediate change or response. But, I know our kids are doing better--somewhere in this building. No, let me change that. Our special kids are doing better, but we don't have any statistics to prove that.

While some expressed frustration with the slow pace of change, others felt too much is happening too fast without proper planning and evaluation strategies built in from the beginning.

If something isn't working we can't go on year after year and say, "Oh, isn't this great" and not know whether it is or not. I think that's what's happening here. Everybody is getting all this publicity and they

are afraid to say, "This isn't working" because they will look like a failure.

[Restructuring] is making us more accountable for what we do. We need to document a lot better what we do to see if it actually does work. It will take maybe four years to see if teaming is actually working. I think it is working in some areas. The dropout numbers are down; students' motivation has increased; they want to be part of the school. But maybe it's really because teachers care around here.

We're trying to implement too many things at one time. It's stretching people too thin. . . . We have a lot of at risk kids here; that's no secret. With this many at risk, you have to focus more, you need to limit your activities to a few and concentrate on doing those really well so in the end you can feel you've accomplished something.

Some felt they are caught in a difficult transition between the old expectations, "the concrete laden practices of the past," and the new. One captured this view with the comment:

I think right now we're sort of in that gray area where we're trying to do things the old way and the new way and we're spreading ourselves thin. . . . It takes you time to get rid of those old ways of doing things. Once we do, things will be a lot easier.

And, some expressed frustration about the prospects of being held accountable for two different ways of assessing students. One commented:

We get mixed messages. We hear a lot about authentic assessment and performance outcomes, but then a lot of people are worried about our test scores. . . .that they aren't up as high as they should be or that everyone else's scores are up, too, and they aren't doing all the things we're doing, so why are we doing all these things. If we're doing things that aren't measured by those tests, I wish someone in authority would tell us, "It's okay; you're doing the right thing" to focus on authentic assessment, for example.

These comments identify wide ranging issues about the process, content, and outcomes of the school improvement efforts. They also indicate that these three schools are attempting many changes as they tackle new practices such as shared decision making, multiage grouping, cooperative learning, and authentic assessment. The schools are also operating in a district which has advocated such changes since the mid-1980s and in a state which in 1990 mandated such reforms as school-based decision making, the elimination of grade levels K-3, and performance-based outcomes.

Attempting such varied changes simultaneously is supported by that school improvement literature which has documented the failure of piecemeal reform in which discrete "innovations" such as a particular reading program are "implemented" as solutions to particular problems (see, for example, McLaughlin, 1990). Instead, much current literature stresses the importance of systemic reform which is fundamental and ongoing, aimed at establishing new patterns of rules, roles, and relationships across the entire educational system (Schlechty, 1990). As Elmore and McLaughlin (1988) put it, reform should be viewed as "steady work."

Clearly the schools we are studying are engaged in steady work. But the data suggest some potentially critical threats to continued success with this approach to systemic change. An important emergent--and still unresolved--concern is how power and authority over reform are to be distributed. First, as Miller and Lieberman (1988) have asked, given the trend toward a focus on "teachers themselves as the object and subject of change" (p. 13), who assumes the authority and responsibility for what happens? As they point out,

The whole area of leadership, who assume it, who should have it, and under what conditions is an area in need of further inquiry. Is teacher leadership a viable strategy or, as the DESSI study indicates, is it sufficient for teachers to learn to master materials and techniques that administrators or others have selected for them? In whose interest is the press for professionalism? (p. 12)

A second issue is whether resources and materials should to be locally developed, as the Rand study determined, or externally developed and imported for adoption, thus saving time and money, as the DESSI study argued. The emphasis in the schools in our study has been on local development. While one effect is clearly teacher ownership of change, another is a significantly increased work load. It remains to be seen if the resulting role overload is a necessary but temporary condition of change or if resources eventually will be reallocated to sustain redefined teacher roles.

A third issue, of special importance locally, is the yet-to-develop effects of recent reforms enacted by the state legislature. For example, site-based management in the schools in our study has to this point been voluntary, but current law mandates it in all schools in the state within five years. Indeed, local district efforts have focused on a few schools most willing to try new approaches. This "nurtured, sheltered agenda," as one local reformer terms it, is now being challenged by pressures to adopt change on an inclusive, district-wide basis.

A fourth issue, also arising from state legislation, concerns how the mandate for performance-based student assessment will play out. In part, the issue is about what counts as appropriate measures of student accomplishment--NAEP-type, paper and pencil testing or what Wiggins (1989) and others call authentic assessment. Will all children be tested every year? Will alternatives to paper and pencil testing be supported and, if so, by whom? In part, the issue is again about local versus state control. Surely, these and other such questions will continue to affect how school improvement proceeds, not only in the schools we have been following but in all schools in the state. As McLaughlin (1990) has argued,

...the factors that enable practice--productive collegial relations, organizational structures that promote open communication and feedback, and leadership that "manages" opportunities for professional growth and nurtures norms of individual development, for example--are not amenable to direct policy fixes because they do not operate singly or consistently across settings. (p. 15)

Our data indicate that these factors--collegiality, administrative support, and interactive organizational structures--are clearly present, in varying degrees, in the three schools we studied. It remains to be seen if "policy fixes" mandated by the state will support or threaten local reform adaptations begun prior to passage of the legislation. There is an inherent tension between the state's desire for quality control and reformers'

contention that local variability is essential to effective change. In effect, the state is attempting to provide a blueprint for safe educational change. But, despite problems in unresolved issues, the schools in our study demonstrate that there is something to be said for flying the plane while you're building it.

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APPENDIX  
Ten Factors Used in Analyzing  
Possible Multiplier Effects

Factor 1: Teachers' belief that school can overcome problems associated with students' home environment (7 items).

Factor 2: Teachers' belief in their own, personal efficacy (4 items).

Factor 3: Teachers' belief in their own teaching techniques (3 items).

Factor 4: The extent to which the school provides an "orderly" climate for learning (7 items).

Factor 5: The extent to which the school provides an "open" climate for learning (4 items).

Factor 6: Teachers' influence on school administrative activities (5 items).

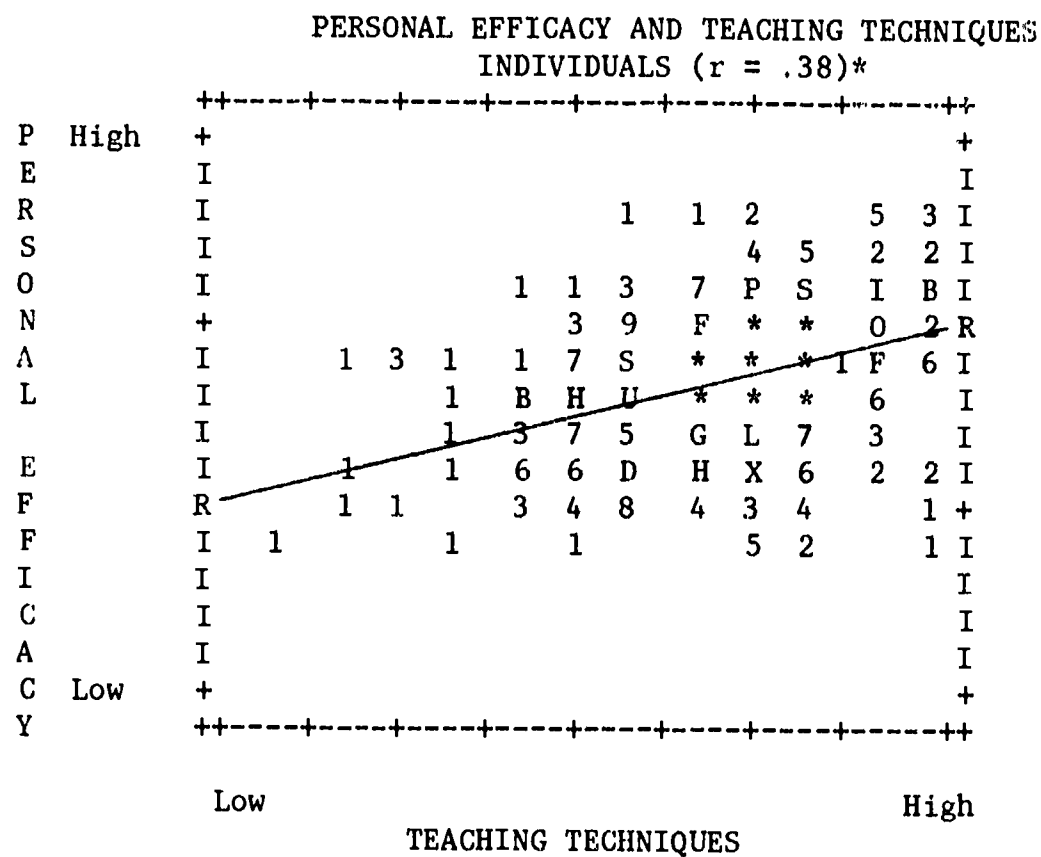
Factor 7: Teachers' influence on classroom activities (5 items).

Factor 8: Teachers' influence over "intermediate" activities (not clearly administrative or classroom) (2 items).

Factor 9: Teachers' role in school decisionmaking (8 items).

Factor 10: Teachers' role in team decisionmaking (for those teachers who work on interdisciplinary teaching teams) (8 items).

Figure 1



\*The letters in the scattergram represent different frequencies of respondents; e.g., A = 10, B = 11, ..., \* = 36.

Figure 2

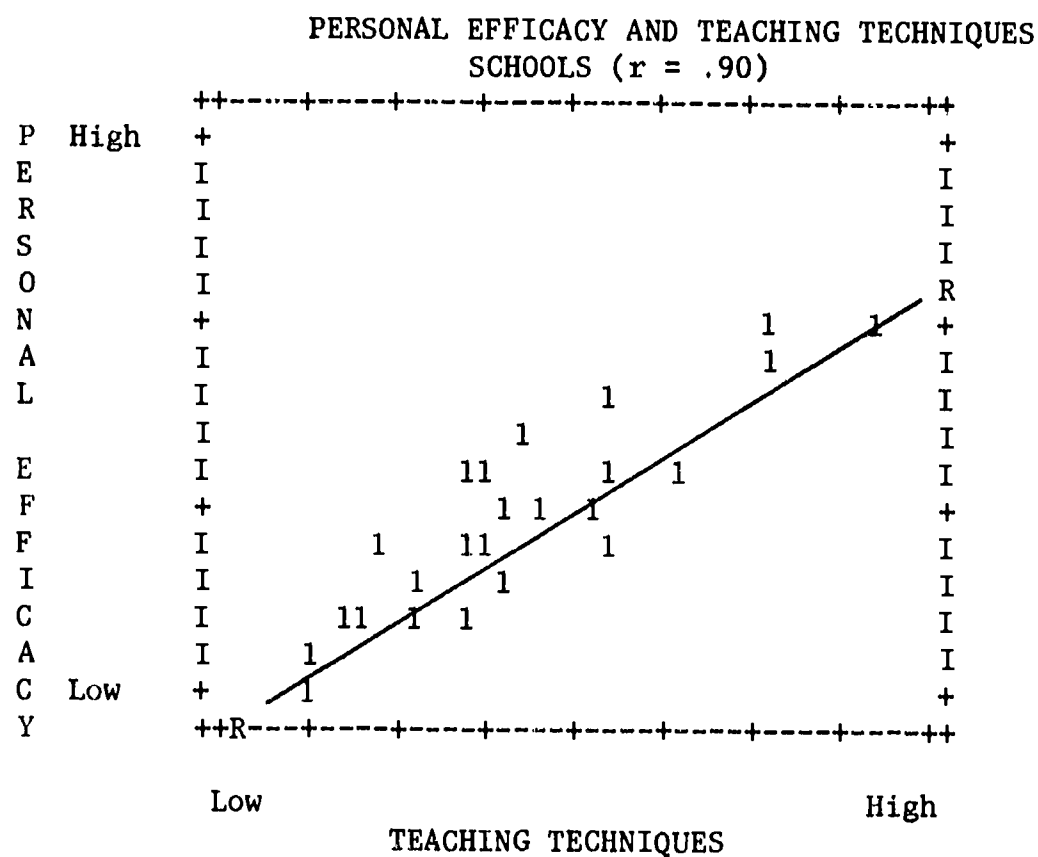
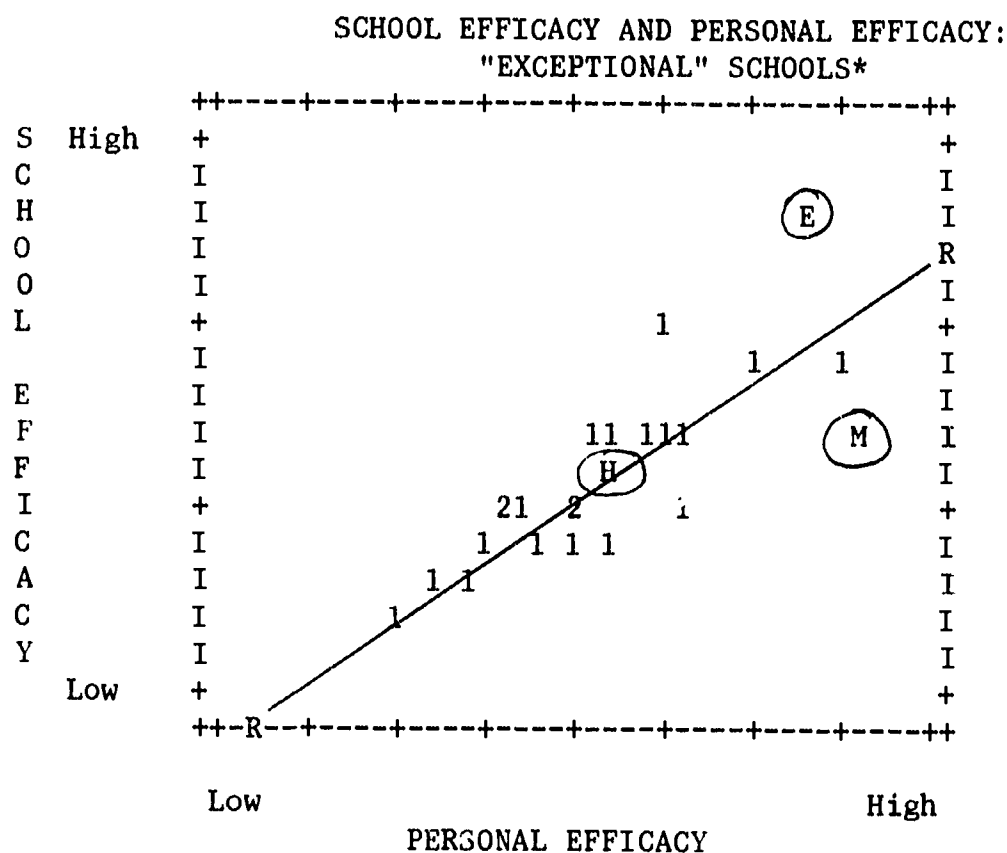
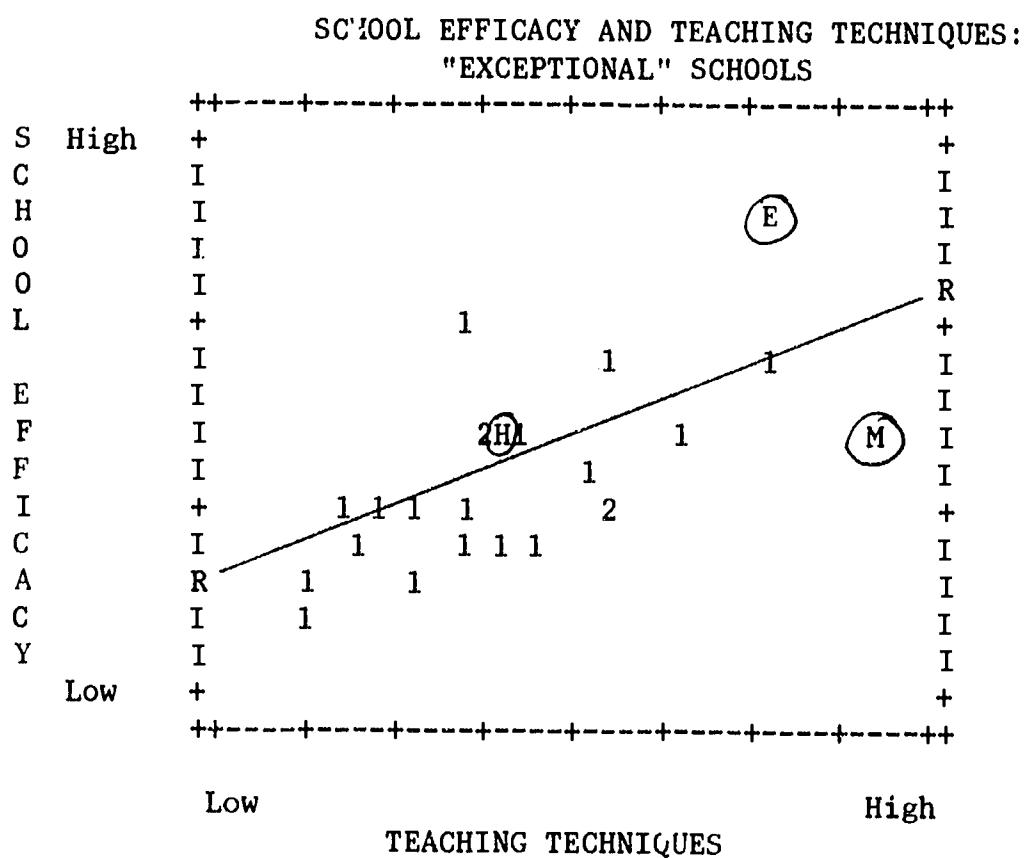


Figure 3



\*E = elementary school; M = middle school; H = high school

Figure 4



\*E = elementary school; M = middle school; H = high school